MISCELLANEOUS.

FAUNA OF DORSETSHIRE.

To the Editors of the Annals and Magazine of Natural History.

I SEND you an account of the occurrence of two or three rare birds which do not seem to be noticed in Dr. Pulteney's 'Nat. Hist. of Dorsetshire,' viz. *Scolopax Sabini*, shot by George Morant, Esq., about the middle of November last at Muston, near Dorchester, and preserved by Mr. Wheatham of Abbotsbury, who prepared also *Falco peregrinus* for me, which was taken alive here by a labourer two winters ago just after it had killed a woodpigeon and was going to devour it. *Strix nyctea* was shot in a wood at Langton, near Blandford, two or three years ago, belonging to J. J. Farquharson, in whose possession I saw the specimen (a most beautiful and dark spotted [♂ ?] one). The *Ardea nigra* (Black Stork) was also shot a year or two ago near Wareham, and is now in the possession of the Earl of Malmesbury. Mr. Austice of Bridgewater lately mentioned in the paper that *his* specimen (sent to Col. Montagu) was unique; but I think Mr. Edward Quekett, of the Langport Museum, told me another had been shot a few years ago between that town and Bridgewater, which he endeavoured to obtain, but it found its way to Taunton in rather a mutilated state. Thus we have four instances of its being found in Britain; and should any doubt arise, a reference to the persons named above would settle the matter. I have seen the solitary snipe myself in Elsington Wood (the property of the Earl of Orford). I saw the gray wagtail yesterday; it has some yellow above the tail, *not* a yellow breast (I am not much of an ornithologist, but I am pretty sure I am right), and it is not unfrequent here in winter and spring, and three sorts I saw formerly in plenty in ploughed fields near Cambridge in spring, whilst being ploughed. The Egyptian goose was shot last winter at West Stafford, near Dorchester, and is now amongst a collection of aquatic birds belonging to (my cousin) John Floyer, Esq. *Merops apiaster* (Bee-eater), shot many years ago at Chidiock near Bridport, is in the Museum there, belonging to the late Dr. Roberts, who suspected that the bird had escaped from some cage.

From the *Dorset County Chronicle*, Jan. 1st, 1835, is the following:—"*Phoca vitulina* was taken off Portland, Dec. 29, 1834, in a cod-net; weight, 80 lbs.; 3 feet 6 inches from snout to tail; body, 26 inches in circumference;" now in the museum of Mr. Bridge, Surgeon, Weymouth. We have had lately about here rabbits of a black slate colour and of a yellowish cast; and in Yorkshire I saw a white one, at large, but suspect some tame rabbit had escaped and caused the mixture. I also saw some years ago a stuffed *gray* hare in the possession of Mr. Goatley of Newbury, Berks. An eagle was shot in Sherborne Park some years ago, and is in the possession of the Earl of Digby.

Circus cinerascens (Ash-coloured Harrier), shot near Charmouth by C. Bartlett, Esq., on the authority of Dr. B. R. Morris; also a Hoopoe near Charmouth, spring of 1835, by Lord Bridport's

gamekeeper; also *Cinclus aquaticus* (Water Ouzel), near the same place; a *hybrid* between the pheasant and turkey, figured by Edwards from one shot (out of four or five) at Hanford by the late H. Seymer, Esq., F.L.S.; *Anthus rupestris* (Rocklark), common at Charmouth and Portland; Least Willow-wren, Isle of Purbeck, the late Rev. J. M. Colston; *Turdus* ? (*Pastor* ?) *roseus*, shot in Portland, 1831 or 1832, by the Rev. G. Port, now in Stalbridge Museum (Mr. Hoddinott); *Emberiza nivalis*, shot near Turnwood prior to 1826, in the possession of the Rev. E. Stuart of Houghton; Pied Flycatcher, Mr. Selby had one from Dorset; *Emberiza cirlus*, Charmouth, Dr. Morris; *E. montifringilla*, near Blandford, the late Hon. A. Stuart, and also near Christchurch, Hants; *Hirundo riparia* I once saw late in autumn in *very great* abundance near late (the old passage now) Portland Bridge, as if preparing to migrate; Lesser Tern, at Glanville's Wootton, end of October 1831; Lesser Black-backed Gull, Charmouth, Dr. Morris; *Larus ridibundus* (Black-headed Gull), Charmouth, Dr. Morris; 1831–32, *Tringa maritima* (Bruce), shot near Lyme Regis; *Colymbus stellaris* and *Procellaria Leachii* near Charmouth, by R. H. Sweeting, Esq., Surgeon, Charmouth.

Your obedient Servant,

Christmas Eve, Glanville's Wootton, near Sherborne, Dorset. J. C. Dale.

Ribes petræum.—In Hooker's British Flora, ed. 4, *Ribes petræum* is combined with *R. rubrum*, and Wulfen's figure in Jacq. Aust., t. 49, is quoted as "bad;" Smith also, in Eng. Bot., fol. 705, considers that same figure as faulty, from the colour of its flowers. Now it appears to me that Hooker is correct in referring the *R. petræum* of Smith to *R. rubrum*, but wrong in quoting Wulfen, since his plant is described by all the continental writers as a distinct species, characterized by a campanulate coloured calyx, with its edges ciliated, and leaves deeply divided into somewhat triangular acute lobes, which are not serrated to their base; whilst in *R. rubrum* the calyx spreads so much as to be almost flat, and is not ciliated, and the leaves are less deeply divided into rounded blunt lobes, serrated to their base. I have examined specimens of *R. petræum* from Bohemia (contained in Tausch Pl. Selectæ), from Croatia (being No. 1736 of Reich. Fl. Exsic.), and from the Vosges mountains, and find them to agree exactly with the above characters, and to be quite distinct specifically from the plant called *R. petræum* in Britain. The figure in Jacquin's work is certainly far from being a good one, for it represents the flowers of *R. petræum* as spreading in the same manner with those of *R. rubrum*, which is certainly not the case in the specimens that I have examined, and does not agree with the descriptions given by foreign authors. Charles C. Babington.

Cream-coloured Courser.—Mr. Mummery informs us that there has just been placed in the Margate Museum a fine male specimen of the Cream-coloured Courser (*Cursorius europæus*), an African bird, and rarely found north of the Mediterranean (see Mr. Yarrell's 'Birds').

Some years ago one was shot by Mr. Hammond of St. Alban's Court, near Wingham, in Kent. The present specimen was shot by a boy employed in keeping crows in a field at Dandelion, near Margate, on the 21st of last December, and sold for fourpence to a dealer.

LONGEVITY OF GEESE.

To the Editors of the Annals and Magazine of Natural History.

Gentlemen,—Most willingly do I concede to Mr. Hassall priority in his observations on the phosphorescence of zoophytes, &c.,* and I regret that I was ignorant of them till I received a kind and polite note from himself. I have little reason however to regret that I sent my paper to you, as it has been the means of obtaining for me the acquaintance of Mr. Hassall, whose experiments have been made on a richer field and a more extensive scale, and who writes in the *con amore* style of a true naturalist.

Before I lay down my pen, may I use the liberty of asking you, as I am not deeply read in Anserine annals, whether you can tell me how many years a goose may live, if insured against all deadly attacks at Christmas and New-Year's-day from gourmand and gastronome? You may perhaps archly reply, that you could give a good guess, if you knew the age of some of your veteran correspondents. I shall not tell you mine; but I may state that I am not yet so old as a goose whose premature death was recorded about seven years ago in my manuscript *memorabilia*. I was then told by the Rev. Mr. Gibb, that when he was tutor in the family of Mr. Campbell, of Auchlian, in Argyleshire, a new cook, by mistake, killed a goose which had reached the patriarchal age of threescore and four years. This was matter of great sorrow to the family, for the goose was precisely the same age as the *Laird*; and willingly would they have cherished it all the days of its natural life. With these feelings of regard, it would have been like cannibalism to feast on their old feathered friend. Mr. Gibb and two of his pupils were at Glasgow College when the catastrophe took place, and they sent the slaughtered goose to them, that in their ignorance they might regale themselves without prejudice. The goose was welcomed and roasted, and served up; but sharpset as these young Highland chieftains were, poor goosie set them at defiance, for its flesh was as tough as leather. Yours, &c., D. Landsborough.

Manse of Stevenston, Ayrshire, 13th January 1842.

M. PETIT ON THE QUESTIONABLE AUTHENTICITY OF NAMES GIVEN TO UNDESCRIBED GENERA AND SPECIES.

We have submitted to our readers in one of the late numbers of the 'Revue Zoologique,' some observations tending to show the error into which Dr. Grateloup had, in our opinion, been led, in considering as definitely established specific names given by him, *without description*, to some new shells which he did not actually make known till subsequently, and after Mr. Sowerby.

* We would refer our correspondents to Ehrenberg's treatise on the phosphorescence of the sea in the Memoirs of the Berlin Academy.—Ed.

Since our article appeared, we have received several letters, proving the adhesion of various persons to these principles, the general adoption of which seems to them to be quite indispensable for putting an end to this confusion; which, as one of our [English] correspondents writes, "*is constantly increasing in the nomenclature of species.*"

The Academy of Sciences has also just sanctioned the opinion which we have expressed on this subject, on the following occasion.

At the very time when we were opposing the course pursued by Dr. Grateloup, the medical officers belonging to the sloops Astrolabe and Zelée communicated to the Institute some short descriptions of birds, insects, and mollusks, &c., collected by them during their expedition, thinking in this manner to entitle their labours to take their date. This was proceeding exactly as Dr. Grateloup did, if the descriptions communicated were not inserted textually in the proceedings of the sittings of the Academy of Sciences. Such insertion has not been ordered, nor anything further than a mere acknowledgement of the sending the document, together with a bare list of specific names; this mode of giving publicity has then been rejected by the Academy; but it has done still more: a naturalist living in Paris desired to inspect the descriptions thus deposited in the archives of the Institute; for this purpose he addressed a request to the Secretary, who did not think it right to entertain it. The subject is thus mentioned in the *Compte Rendu* of the sitting of the 27th of September 1841, p. 666.

"M. Allibut asks permission to inspect the notices sent by MM. Jaquinot, Hombron and le Guillon, concerning observations in natural history made during the voyage of the Astrolabe and the Zelée.

"M. Allibut must apply to the authors to obtain an opportunity of consulting their writings, or wait until these writings *have been made public by being printed.*"

It is thus, in fact, decided by the Academy that the communications made by MM. Guillon, Jaquinot, and Hombron cannot constitute a *publication*, and that their labours must remain unpublished, in manuscript, until they shall *have been made public by being printed.*

Moreover, one of these medical officers, Dr. le Guillon, fully understood how insignificant was the fact of the deposit which he had made with the Institute, a deposit sanctioned by courtesy merely; for he hastened to get a considerable number of the descriptions which he had sent to the Academy inserted in the 'Revue de la Société Cuviérienne,' of which he is a member; and by this real publication has established an authentic date for his labours: the English do so in their "*proceedings*;" so also did M. d'Orbigny upon his American voyage. It is the course that MM. Jaquinot and Hombron will also probably adopt; the means of publication will not be wanting at Paris; and if it were necessary, the editor of the last voyage of M. Dumont Durville would not refuse to devote a hundred francs to the publication of a synopsis of whatever they have brought which is new.

These two gentlemen will also feel the necessity of not separating themselves from their laborious colleague M. le Guillon; they will not wish to leave him all the burden and all the honour of the work; still less will they be able to treat, as having no existence, whatever has been described before them, *and made public by being printed.* There would be but one voice in opposition to this manner of treating science, and without being aware of it, they would come to a lamentable result, that of for ever throwing discredit upon publications for which the state makes enormous sacrifices.—S. Petit. *Revue Zoologique*, p. 329, No. x. 1841.

[We know nothing of the merits of this particular case, but insert the above as the subject to which it relates is of general interest.—Ed.]

NESTS OF THE HIRUNDO RIPARIA.

"M. Eugene Robert, having had an opportunity of observing the *nests* which the sand-martens excavate in the gravelly banks along the river Volga, noticed that the upper surfaces exhibited a yellowish white plastering of animal matter. This matter, in which he expected to find some analogy to that of which the nest of the *Hirundo esculenta* is composed, appeared to him formed of the spawn of fish, perhaps of the sturgeon, which is common in that river.

"It is impossible," says M. Robert, "not to observe in this arrangement an admirable foresight in the bird, to prevent the falling down of the gravel from destroying its dwelling."—*Comptes Rendus* Nov. 1841.

Some Notices of the Late Professor Don, and of his Father, Mr. George Don, formerly Curator of the Edinburgh Botanic Garden*.

As Professor Don was, in the strictest sense of the terms, a hereditary botanist, naturalist, and man of general information, it may not be amiss, before giving an exceedingly brief outline of the principal events of his life, to say something still more brief of his father. We have no occasion to dilate upon the character of either; they are safe in the memories of large circles of friends; and wherever either had an opportunity of making an impression, the remembrance of it is delightful.

Mr. George Don was a native of Kincardineshire, from which, however, his parents removed in his infancy. While yet a very little boy he revisited the place of his nativity; and the clergyman of the parish, having called on the family with whom Don was residing, found the nascent student of nature busily engaged forming into a natural system of his own, all the wild flowers which he had been able to cull in the neighbourhood; upon observing which, the clergyman remarked, that a boy, who voluntarily entered upon such a course at the very dawning of life, would ultimately become one of the brightest and most successful naturalists of his time.

* Extracted from an article in the Florist's Journal, No. xxiv.

The hint was in so far taken, from this prediction, that Don was bound apprentice to the gardener at Dupplin Castle, in Perthshire, a near relation of his own. While in this situation he devoted his leisure time to the study of the natural sciences, especially botany; but he was careful not to neglect his employment. The fact is, that while still at that age at which the majority of boys addict themselves to frivolous sports, Don was a general and successful observer in the fields, and student in the closet; and he continued to be so under all the vicissitudes of a very varied life. The botany of the Grampians, and the secondary hills at their base, was a favourite study with him at the commencement, and continued to be so till the close of his life.

On leaving Dupplin he went to the south of England, and after a short residence there he visited the continent. On the completion of this tour, he returned to Forfar, along with a relation of his own, and soon after established a nursery and botanical collection of plants at Doo Hillock, a spot remarkably well adapted for his purpose, from the great diversity of the soil. Though of very limited extent, some parts of it are very elevated and dry; and the soil passes through all the gradations, from this to a sludgy peat bog. Consequently the soils best suited to every variety of British plants were found within a short distance of each other. While settled here he resumed his observations of nature with fresh ardour, and in the course of his studies passed many nights on the Grampians, sometimes with only the shelter of his cloak.

After residing for some time in Forfar, he went to Edinburgh, where he studied in the medical classes, and acquired some acquaintance with the theory and the practice of the healing art. Amid all this study and practice, he also evinced much knowledge and dexterity in the mechanical arts; and had his main studies not led him to different subjects, he would have been a first-rate artist in the construction of time-keepers, and the finer parts of spinning and other machinery; for even circumstanced as he was, he gave practical proofs of the skill of his head and the dexterity of his hand in such matters.

Some time after, having taken up his residence in Edinburgh, he was appointed Curator of the Botanic Garden there. This appointment brought him in contact with the ablest men in Edinburgh, of pursuits similar to his own; and, among others, with Mr. Patrick Neill, Secretary to the Wernerian Society, and author of some admirable memoirs on scientific subjects. This friendship, begun in congeniality of feeling, went on increasing, till it was closed by the death of Mr. Don in January 1814, or the same month in 1816. Several years before this he had returned to Forfar, to resume the cultivation of his nursery and the study of nature; and here continued to reside till his death. Altogether, Mr. George Don was an extraordinary man, both for the vigour and the versatility of his talent; and had the vicissitudes of his life been recorded and prepared for the press by a competent biographer, they would have

afforded a most curious and entertaining, as well as a most useful memoir.

Mr. Don was married, and had a family of fifteen children, of whom four sons still remain, who are eminent as botanists, as cultivators, or as both.

Professor David Don was born in his father's cottage at Doo Hillock, in the year 1800; and may be said to have been a botanist and cultivator from his very infancy, having acquired a thorough knowledge of these subjects under his father, who made the best of all possible teachers; and along with these studies, and afterwards, he made himself acquainted with Latin, and acquired some knowledge of Greek and Hebrew, as well as those modern languages which could be most serviceable to him in his pursuits.

Mr. D. Don continued in his father's nursery until he made himself, while yet merely a lad, a botanist of no mean acquirements,—we will not say pretensions, for few men, of anything like equal capacity, have been so unpretending as Professor Don. Upon leaving Forfar he went to Edinburgh, in order to enjoy a wider range both of study and of occupation; and while there had charge of the conservatories and stoves in the grounds of Messrs. Dickson, brothers, nurserymen at Broughton, in the close vicinity of that city, who had at that time one of the best collections in Scotland.

After remaining there for some time, Mr. Don removed to London, where his brother George then was, and engaged in the Physic Gardens at Chelsea. Then, or soon after, the late Mr. Lambert, one of the great encouragers of botanical science, was in want of a librarian; and Mr. Don's practical experience, general knowledge, and suavity of manner, recommended him as amply suited for the situation; he accordingly went to reside in the town mansion of Mr. Lambert, to the mutual satisfaction of both parties, and the gratification of Mr. Lambert's scientific friends and the visitors of his ample collection. This situation, and more especially the manner in which the duties of it were discharged, brought Mr. Don into general acquaintance with the higher classes of the botanical world; and soon after the death of Sir Joseph Banks, the illustrious Mr. Robert Brown having resigned his office of Librarian to the Linnæan Society and Curator of its Museum, Mr. Don was chosen as a worthy successor to that first botanist of the age.

In this new position, Mr. Don was found to be a most valuable acquisition to the Society; and his accurate knowledge and amiable manners endeared him to all, while his numerous contributions to science extended his name widely over the botanical world.

About the year 1836, he was appointed Professor of Botany in King's College; which situation he held jointly with the Librarianship of the Linnæan Society.

He was seized with his last illness, in a serious form, in the end of April, or the beginning of May. It may be regarded as a general breaking up of the system, which assumed a topical character, and defied the skill of the most eminent men. Though latterly his

disease became a very painful one, he bore it with singular fortitude, until delivered both from the evil and the good of this world, on the 8th of December 1841. On the 15th of the same month he was borne to his resting-place in the cemetery at Kensal Green; his remains being followed to that mansion of repose by Mr. Brown, Sir William J. Hooker, Mr. Bentham, Mr. Bennet, Mr. Anderson, Mr. Smith, and various other botanists, who, no doubt, felt the blank which had been made in their circle. Of his character we need add nothing to what has been already embodied in this brief notice.

[We would add, as our own record of his personal character, that he was unpretending, disinterested, openhearted, and sincere. His native kindness, cordiality and hilarity as a companion will long be affectionately remembered by those who knew him.—Ed.]

METEOROLOGICAL OBSERVATIONS FOR DEC. 1841.

Chiswick.—Dec. 1. Overcast. 2. Cloudy: rain. 3. Fine: rain: clear at night. 4. Clear: heavy rain: densely clouded. 5. Cloudy: clear and fine: cloudy. 6. Overcast: heavy rain: clear. 7. Clear: overcast at night. 8. Rain: cloudy. 9. Very fine: rain. 10. Overcast: rain: clear. 11. Slightly overcast: clear: rain at night. 12. Rain: stormy. 13. Rain: clear at night. 14. Cloudy and cold. 15. Densely overcast. 16. Very fine. 17. Clear and frosty. 18. Frosty haze. 19. Sharp frost: slight snow. 20. Frosty: fine. 21. Clear. 22. Slight frost: drizzly. 23. Hazy: drizzly. 24. Overcast: rain. 25. Rain: clear. 26. Overcast: clear: cloudy at night. 27. Hazy. 28. Foggy: cloudy and fine. 29. Dense fog. 30. Hazy. 31. Very fine: rain at night.

Boston.—Dec. 1. Fine: rain yesterday P.M. 2. Fine. 3. Rain: rain early A.M. 4. Stormy: rain early A.M.: rain A.M. and P.M. 5. Stormy. 6. Rain: rain early A.M. 7. Fine. 8. Cloudy: rain early A.M. 9. Fine: rain P.M. 10. Cloudy: rain A.M. 11. Fine. 12. Cloudy: rain early A.M.: rain A.M. 13. Cloudy. 14. Stormy. 15. Cloudy. 16. Fine: rain early A.M. 17—19. Fine. 20. Misty. 21, 22. Fine. 23. Cloudy. 24. Fine. 25. Fine: rain P.M. 26—28. Fine. 29. Rain: rain early A.M. 30, 31. Fine.

Applegarth Manse, Dumfries-shire.—Dec. 1. Slight showers. 2. Rain A.M. 3. Wet and stormy. 4. Fine A.M.: rain P.M. 5. Fine. 6, 7. Rain morning and evening. 8. Rain morning and evening: Aurora. 9. Frost A.M.: rain P.M. 10—12. Heavy showers. 13. One slight shower. 14. Frost A.M.: Aurora. 15. Heavy rain. 16. Rain and squalls. 17. Clear and frost. 18. Clear and frost: cloudy P.M. 19. Slight fall of snow: frost. 20. Thick fog: frost. 21. Frost. 22. Frost: fine. 23. Fog and thaw: rain. 24. Rain. 25. Frost A.M.: rain P.M. 26. Frost, fair and clear. 27. Frost A.M.: thaw and rain P.M. 28. Fine. 29. Dull and moist: rain P.M. 30. Thick fog: rain P.M. 31. Fog and rain.

Sun shone out 21 days. Rain fell 21 days. Frost 10 days. Snow 1 day. Fog 4 days. Aurora 2 days.

Wind north ½ day. North-north-east ½ day. North-east 1 day. East 2 days. South-east 1½ day. South-south-west 4 days. South-west 11½ days. West-south-west 1½ day. North-west 5½ days. North-north-west 3 days.

Calm 9 days. Moderate 9 days. Strong breeze 6 days. Boisterous 6 days. Stormy 1 day.

Mean temperature of the month	38°·9
Mean temperature of Dec. 1840	36 ·0
Mean temperature of spring-water	41 ·6

Meteorological Observations made at the Apartments of the Royal Society, LONDON, *by the Assistant Secretary*, Mr. Roberton; *by* Mr. Thompson, *at the Garden of the Horticultural Society at* CHISWICK, *near London*; *by* Mr. Veall, *at* BOSTON; *by* Mr. Dunbar, *at Applegarth Manse*, DUMFRIES-SHIRE, *and at Sandwick Manse*, ORKNEY.

Days of Month.	Barometer.								Thermometer.										Wind.					Rain.					Dew-point.
	London: Roy. Soc. 9 a.m.	Chiswick.		Boston. 8½ a.m.	Dumfries-shire.		Orkney, Sandwick.		London: R.S.			Chiswick.		Boston. 8½ a.m.	Dumf.-shire.		Orkney, Sandwick.		London: R.S. 9 a.m.	Chiswick. 1 p.m.	Boston.	Dumfries-shire.	Orkney, Sandwick.	London: R.S. 9 a.m.	Chiswick.	Boston.	Dumfries-shire.	Orkney, Sandwick.	Lond. R. S. 9 a.m.
1841. Dec.		Max.	Min.		9 a.m.	9 p.m.	9½ a.m.	8½ p.m.	Fahr. 9 a.m.	Self-reg. Mx.	Self-reg. Mn.	Max.	Min.		Max.	Min.	9½ a.m.	8½ p.m.											
1.	29·396	29·536	29·301	28·97	29·06	29·14	29·10	29·33	48·7	55·8	47·6	54	43	43·5	47	42½	43	38	se.	se.	calm	e.	calm	·055	·08	·26	.....	·50	48
2.	29·486	29·437	29·207	29·02	29·18	29·17	29·40	29·42	49·3	52·4	47·3	53	46	44	48	38	43	44	s.	s.	calm	ne.	e.	·033	·15	.....	.....	.....	47
3.	28·954	29·246	28·948	28·62	28·78	28·78	29·38	29·25	51·2	53·3	49·0	54	43	48	49	41½	45	45	e.	sw.	calm	se.	e.	·039	·17	·05	.....	·10	48
4.	29·272	29·322	29·297	28·72	28·85	29·19	29·21	29·48	48·0	53·4	45·4	49	40	46	49½	42	46	45	s.	sw.	w.	sw.	e.	·172	·13	·10	.....	·43	45
5.	29·960	30·038	29·938	29·39	29·74	29·77	29·85	29·83	44·0	50·6	43·4	50	37	48	47½	40½	42	45	w.	w.	w.	sw.	se.	·161	·14	·21	.....	.....	40
6.	29·776	29·761	29·582	29·29	29·34	29·43	29·25	29·13	50·2	51·4	43·5	52	35	48	49½	41	46	46½	s.	sw.	sw.	wsw.	ses.	·091	·30	·21	.....	·35	45
7.	29·916	29·868	29·793	29·42	29·55	29·40	29·40	29·21	43·0	53·0	40·6	50	47	42	50	39	46	46	s.	w.	sw.	sw.	w bys.	·222	·15	·25	1·20	·30	43
8.	29·488	29·478	29·391	29·00	29·14	29·40	29·03	29·51	50·7	51·8	43·2	54	33	50	51	42½	45	36	s.	w.	calm	sw.	w byn	·119	·01	·12	.....	·23	47
9.	29·916	29·865	29·708	29·44	29·70	29·10	29·64	29·11	41·3	54·4	40·8	44	38	35·5	47	30	35	37	w.	w.	calm	sw.	s.	.....	·15	.....	.....	.....	40
10.	29·386	29·659	29·252	28·91	29·01	29·36	28·91	29·21	50·7	52·2	41·6	55	36	47	43½	40	40	39	s.	sw.	calm	nw.	nw.	·116	·07	·08	.....	·51	46
11.	29·916	29·913	29·879	29·40	29·56	29·54	29·38	29·38	40·8	54·8	40·0	47	37	40	44	35	42	40	w.	w.	w.	ssw.	w.	·083	·09	·11	.....	·07	40
12.	29·660	29·660	29·515	29·15	29·15	29·08	29·25	29·10	47·7	49·3	41·0	52	47	46	50	40½	38½	40½	s.	sw.	calm	ssw.	e.	·077	·17	·04	.....	·24	43
13.	29·366	29·350	29·238	28·79	28·9..	29·04	28·80	29·02	51·0	52·3	48·4	52	40	50	50	41	39	39	s.	sw.	calm	ssw.	calm	·213	·08	·03	.....	·12	46
14.	29·540	30·033	29·490	29·06	29·50	29·68	29·42	29·50	42·2	53·2	42·2	42	27	38	41½	33	35	37	w.	n.	n.	sw.	w.	·061	.....	.....	.....	·17	40
15.	29·908	29·907	29·510	29·42	29·19	29·12	28·91	28·86	42·8	43·7	35·2	50	37	40	48	35½	42	39	s.	s.	se.	sw.	sw.	.....	·10	.....	1·38	·17	39
16.	29·400	29·419	29·266	28·96	28·90	29·02	28·88	29·17	42·3	50·3	41·6	49	30	37·5	42	36	38	34½	s.	w.	calm	ssw.	n.	·063	.....	·06	.....	·26	42
17.	29·494	29·609	29·461	29·06	29·33	29·40	29·27	29·33	35·3	45·7	35·4	39	17	35	39½	27½	34	37½	w.	w.	calm	nnw.	nw.	.....	.....	.....	.....	·45	38
18.	29·586	29·585	29·402	29·26	29·39	29·30	29·33	29·36	31·3	38·8	31·2	35	16	29	35	22	35	31	s.	ne.	calm	nnw.	calm	.....	.....	.....	.....	·15	34
19.	29·252	29·270	29·188	29·05	29·24	29·16	29·50	29·40	31·4	35·7	29·9	37	27	24	34	22½	31	37	n.	ne.	calm	nw.	e.	.....	.....	.....	.....	.....	28
20.	29·226	29·444	29·218	30·00	29·15	29·33	29·37	29·45	32·7	35·5	31·6	39	20	28·5	32	22	39	37½	n.	ne.	calm	nnw.	e.	.....	.....	.....	.....	·44	30
21.	29·626	29·676	29·599	29·32	29·42	29·50	29·40	29·43	32·3	36·2	32·8	35	26	28	38	22½	31	35	nw.	w.	calm	nw.	nw.	.....	.....	.....	0·43	.....	32
22.	29·790	29·851	29·780	29·42	29·59	29·61	29·65	29·64	32·8	37·0	32·6	37	33	27	33	24	33	32	w.	w.	calm	e.	calm	.....	·02	.....	.....	·14	33
23.	29·860	29·854	29·793	29·46	29·44	29·50	29·40	29·42	39·7	40·8	33·3	46	27	36	40½	27	35	42	s.	sw.	calm	se.	se.	·014	·06	.....	.....	.....	38
24.	30·050	30·016	29·902	29·64	29·56	29·47	29·35	29·10	39·3	47·4	36·9	50	42	37	47	32½	37	41	s.	sw.	calm	sw.	se.	·060	·12	.....	.....	·13	40
25.	29·768	29·769	29·657	28·30	29·40	29·40	29·12	29·30	44·3	50·4	39·6	49	22	40	41	36	41	42	s.	sw.	calm	sw.	w.	·183	·06	.....	.....	·16	42
26.	29·794	29·944	29·755	29·46	29·65	29·83	29·65	29·90	35·8	46·0	33·4	39	24	32	41	30½	41	37½	n.	nw.	calm	n.	nw.	·044	·01	·03	.....	·06	35
27.	30·132	30·121	30·084	29·77	29·90	29·80	29·71	29·70	31·7	40·2	31·4	36	25	29	41½	26½	41	42	sw.	w.	calm	nw.	sw.	.....	·02	.....	.....	·14	33
28.	30·088	30·063	30·054	29·72	29·92	29·95	29·94	30·00	38·8	40·0	31·5	44	37	35	43½	37	40	40	w.	nw.	calm	nw.	nw.	·025	·02	.....	0·40	·12	35
29.	30·106	30·078	30·035	29·78	29·95	29·92	29·94	30·03	43·4	45·2	39·3	45	39	38	45	39	44	42	w.	nw.	calm	sw.	sw.	.....	·05	·08	.....	.....	39
30.	30·126	30·166	29·927	29·77	29·90	29·91	30·06	30·02	38·8	46·8	39·0	42	31	36·5	46	39½	40½	37½	ne.	se.	calm	sw.	s.	·038	.....	·04	.....	·14	38
31.	30·262	30·211	30·187	29·89	29·93	29·92	29·92	30·01	35·0	43·2	35·0	40	33	37	45	41	41	43½	e.	se.	s.	sw.	s.	.....	.....	.....	.....	.....	35
Mean.	29·694	29·766	29·592	29·27	29·140	29·422	29·400	29·438	41·5	47·1	38·8	45·80	33·38	38·5	43·8	34·4	39·64	39·64						Sum. 1·869	3·15	1·67	3·41	5·43	Mean. 39